

REMARKS

This Amendment is submitted in reply to the Non-Final Office Action mailed on April 3, 2009. No fees are due herewith this Amendment. The Director is authorized to charge any fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 0112701-00735 on the account statement.

Claims 1-19 are pending. Claims 1-2, 4-13 and 16-18 were previously withdrawn. In the Office Action, Claims 3, 14 and 19 are rejected under 35 U.S.C. §102. Claims 3, 14-15 and 19 are rejected under 35 U.S.C. §103. In response, Claims 3, 14-15 and 19 have been amended. In view of the amendments and/or for the reasons set forth below, Applicants respectfully request that the rejections be withdrawn.

In the Office Action, Claims 3, 14 and 19 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Publ. No. 2002/0099032 to Higashi et al. ("*Higashi*"). In view of the amendments and/or for at least the reasons set forth below, Applicants respectfully submit that *Higashi* is deficient with respect to the present claims.

Currently amended Claims 3, 14 and 19 recite, in part, products or compositions comprising an effective amount of at least one raw plant material selected from the group consisting of *Daucus*, *Helianthus*, *Beta* and combinations thereof, the plant material being processed to obtain glucosamine in amounts greater than 150 mg/kg dry matter. The amendments do not add new matter. The amendments are supported in the specification at, for example, page 10, lines 8-12; page 10, lines 20-24. In contrast, Applicants respectfully submit that *Higashi* is deficient with respect to the present claims.

Applicants previously submitted an Affidavit under 37 C.F.R. §1.132 ("*Affidavit*"). As supported by the *Affidavit*, and as taught by Applicants' specification, the present disclosure is directed, at least in part, toward products and compositions containing plant materials and/or glucosamine generated from plant materials through a drying process for the maintenance of joint health, or prevention, alleviation and/or treatment of osteoarthritis, or the improvement of the skin quality and prevention or restoration of age-related alterations of the skin. Surprisingly, Applicants have found that glucosamine can actually be formed in high amounts during a controlled drying process of some raw plant materials. See, specification, page 8, lines 14-15.

The drying process of the present disclosure surprisingly provides a way to increase/obtain glucosamine at high levels (*i.e.*, higher than amounts in corresponding fresh (not dried) material). It is likely that during the drying process, the glucosamine comes not from the direct degradation of macromolecules, but, rather, from a release of free fructose and amino acid, followed by the first steps of a Maillard reaction. See, specification, page 11, lines 4-22. In contrast, Applicants respectfully submit that *Higashi* is deficient with respect to the pending claims because *Higashi* fails to disclose or suggest each and every element of the present claims.

For example, *Higashi* fails to disclose or suggest products or compositions comprising an effective amount of at least one raw plant material selected from the group consisting of *Daucus*, *Helianthus*, *Beta* and combinations thereof, the plant material being processed to obtain glucosamine in amounts greater than 150 mg/kg dry matter as required, in part, by the present claims. Instead, *Higashi* is entirely directed toward incorporation of an amino sugar (*e.g.*, glucosamine) to a preparation to make a vitamin B1 stable. See, *Higashi*, Abstract. Indeed, the Examples of *Higashi* are all related to the use of glucosamine salts such as glycosamine hydrochloride. See, *Higashi*, Examples. At no place in the disclosure does *Higashi* disclose or suggest products comprising processed raw plant materials selected from the group consisting of *Daucus*, *Helianthus*, *Beta* and combinations thereof and having glucosamine in amounts greater than 150 mg/kg dry matter as is required, in part, by the present claims.

Further, anticipation is a factual determination that “requires the presence in a single prior art disclosure of each and every element of a claimed invention.” *Lewmar Marine, Inc. v. Barient, Inc.*, 827 F.2d 744, 747 (Fed. Cir. 1987). Federal Circuit decisions have repeatedly emphasized the notion that anticipation cannot be found where less than all elements of a claimed invention are set forth in a reference. See, *e.g.*, *Transclean Corp. v. Bridgewood Services, Inc.*, 290 F.3d 1364, 1370 (Fed. Cir. 2002). As such, a reference must clearly disclose each and every limitation of the claimed invention before anticipation may be found. Because *Higashi* fails to disclose or suggest products or compositions comprising processed raw plant materials selected from the group consisting of *Daucus*, *Helianthus*, *Beta* and combinations thereof and having glucosamine in amounts greater than 150 mg/kg dry matter, Applicants respectfully submit that the anticipation rejection under 35 U.S.C. §102 is improper.

Accordingly, Applicants respectfully request that the rejection of Claims 3, 14 and 19 under 35 U.S.C. §102 in view of *Higashi* be reconsidered and withdrawn.

In the Office Action, Claims 3, 14 and 19 are rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, as being obvious under 35 U.S.C. §103(a) in view of U.S. Patent No. 5,916,622 to Ecochard ("*Ecochard*"). Claims 14 and 19 are rejected under 35 U.S.C. §103(a) as being obvious in view of U.S. Patent No. 6,420,350 to Fleischner ("*Fleischner*"). Claims 14-15 are rejected under 35 U.S.C. §103(a) as being obvious in view of U.S. Patent No. 5,141,964 to Noel ("*Noel*"). Applicants respectfully disagree with and traverse these rejections for at least the reasons set forth below.

As discussed above, Claims 3, 14 and 19 have been amended to recite, in part, products or compositions comprising an effective amount of at least one raw plant material selected from the group consisting of *Daucus*, *Helianthus*, *Beta* and combinations thereof, the plant material being processed to obtain glucosamine in amounts greater than 150 mg/kg dry matter. Claim 15 has been amended to recite, in part, a product comprising an effective amount of at least one raw plant material that is processed by a drying process to obtain glucosamine in an amount greater than 150 mg/kg dry matter. As discussed above, Applicants have found that glucosamine can actually be formed in high amounts during a controlled drying process of some raw plant materials. See, specification, page 8, lines 14-15. The drying process of the present disclosure surprisingly provides a way to increase/obtain glucosamine at high levels (*i.e.*, higher than amounts in corresponding fresh (not dried) material). Applicants also respectfully submit that, as demonstrated in the specification, at the time of the invention, the drying process of the present invention was the only way to increase/obtain glucosamine at high levels from plants. See, specification, page 11, lines 4-5. In contrast, Applicants respectfully submit that *Ecochard*, *Fleischner* and *Noel* are deficient with respect to the present claims.

For example, *Ecochard*, *Fleischner* and *Noel* all fail to disclose or suggest products or compositions comprising an effective amount of at least one raw plant material selected from the group consisting of *Daucus*, *Helianthus*, *Beta* and combinations thereof, the plant material being processed to obtain glucosamine in amounts greater than 150 mg/kg dry matter as required, in part, by currently amended independent Claims 3, 14 and 19. Moreover, *Noel* fails to disclose or suggest a product comprising an effective amount of at least one raw plant material that is

processed by a drying process to obtain glucosamine in an amount greater than 150 mg/kg dry matter as is required, in part, by independent Claim 15.

Instead, *Ecochard* is entirely directed toward the treatment of chicory powder with conditions that melt the powder so that the powder particles are agglomerated. See, *Ecochard*, Abstract. The treatment of the chicory powder is in direct contrast to the present invention that uses fresh plants to obtain increase levels of glucosamine. Further, Applicants note that currently amended Claims 3, 14 and 19 recite, in part, at least one raw plant material selected from the group consisting of *Daucus*, *Helianthus*, *Beta* and combinations thereof. Because *Ecochard* fails to disclose or suggest at least one raw plant material selected from the group consisting of *Daucus*, *Helianthus*, *Beta* and combinations thereof, *Ecochard* fails to disclose or suggest any of the presently claimed plant species.

Fleischner is entirely directed toward supplement compositions designed to support weight loss and increase energy. See, *Fleischner*, Abstract. However, *Fleischner* fails to disclose or suggest any products or compositions having at least one raw plant material, let alone specific species of plant materials that are presently claimed and that are processed to obtain the amounts of glucosamine present in the pending claims. Similarly, *Noel* is entirely directed toward cosmetic compositions comprising a cosmetic base containing glucosamine hydrochloride. See, *Noel*, Abstract, Examples. However, *Noel* fails to disclose or suggest any products or compositions having at least one raw plant material, let alone specific species of plant materials that are presently claimed and that are processed to obtain the amounts of glucosamine present in the pending claims. Therefore, for at least the reasons discussed above, Applicants respectfully submit that the obviousness rejections of Claims 3, 14-15 and 19 are improper.

Accordingly, Applicants respectfully request that the rejections of Claims 3, 14-15 and 19 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same. In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

K&L GATES LLP


BY _____

Robert M. Barrett
Reg. No. 30,142
Customer No. 29157
Phone No. 312-807-4204

Dated: June 26, 2009